Discount Rate Sensitivity

	1% Decrease 5.75%	Current Rate 6.75%	1% Increase 7.75%
Net Pension Liability	\$55,290,121	\$42,264,835	\$31,528,021

Classes of Plan Members Covered

The June 30, 2018 valuation was performed using census data provided by INPRS as of June 30, 2017. Standard actuarial techniques were used to roll forward the total pension liability computed as of June 30, 2017 to the June 30, 2018 measurement date using actual benefit payments during that period of time.

Number as of June 30, 2017	
1. Currently Receiving Benefits:	
Retired Members, Disabled Members, and Beneficiaries	145
2. Inactive Members Entitled To But Not Yet Receiving Benefits	87
3. Inactive Non-vested Members Entitled to a Refund of Member Contributions	134
4. Active Members	209
Total Covered Plan Members: (1)+(2)+(3)+(4)	575

Money-Weighted Rate of Return

The money-weighted rate of return equals investment performance, net of pension plan investment expense, adjusted for the changing amounts actually invested. For the fiscal year ending June 30, 2018, the money-weighted return on the plan assets is 9.3%.

Components of Net Pension Liability

As of June 30, 2018		
Total Pension Liability	\$	103,283,935
Fiduciary Net Position	,	61,019,100
Net Pension Liability	\$	42,264,835
Ratio of Fiduciary Net Position to Total Pension Liability		59.08%



GASB NO. 67 AND GASB NO. 68: REQUIRED SUPPLEMENTAL INFORMATION

SCHEDULE OF CHANGES IN THE TOTAL PENSION LIABILITY AND PLAN FIDUCIARY NET POSITION

Fiscal Year Ending June 30	2013	2014	2015	2016	2017	2018
Total Pension Liability						
Total Pension Liability - beginning	\$56,079,955	\$61,940,389	\$65,336,440	\$77,860,653	\$85,033,204	\$96,655,305
Service Cost (SC), beginning-of-year	1,568,461	1,586,626	1,602,704	1,625,509	1,649,825	1,947,022
Interest Cost, including interest on SC	3,815,835	4,207,150	4,408,568	5,238,761	5,713,781	6,520,834
Experience (Gains)/Losses	1,473,837	0	4,550,500	4,058,049	1,996,389	2,155,542
Assumption Changes	(108,430)	0	5,216,488	0	(215,798)	0
Plan Amendments	1,345,781	0	0	0	6,546,752	0
Actual Benefit Payments	(2,235,050)	(2,397,725)	(3,254,047)	(3,746,129)	(4,068,848)	(3,994,768)
Member Reassignments	0	0	0	0	0	0
Service Purchases	0	0	0	(3,639)	0	0
Net Change in Total Pension Liability	5,860,434	3,396,051	12,524,213	7,172,551	11,622,101	6,628,630
(a) Total Pension Liability - ending	\$61,940,389	\$65,336,440	\$77,860,653	\$85,033,204	\$96,655,305	\$103,283,935
Plan Fiduciary Net Position						
Plan Fiduciary Net Position – beginning	\$27,690,288	\$47,919,739	\$54,507,492	\$53,423,166	\$52,791,683	\$55,575,347
Contributions – employer	19,443,392	1,173,800	1,062,800	1,439,900	1,485,700	3,013,800
Contributions – non-employer	0	0	0	0	0	0
Contributions – member	1,271,481	1,333,635	1,268,695	1,278,678	1,357,689	1,294,661
Net investment income	1,894,508	6,583,284	(34,881)	588,570	4,166,573	5,217,727
Actual benefit payments	(2,235,050)	(2,397,725)	(3,254,047)	(3,746,129)	(4,068,848)	(3,994,768)
Net member reassignments	0	0	0	0	0	0
Administrative expense	(144,880)	(105,241)	(126,893)	(192,502)	(157,450)	(87,667)
Other	0	0	0	0	0	0
Net change in Plan Fiduciary Net Position	20,229,451	6,587,753	(1,084,326)	(631,483)	2,783,664	5,443,753
(b) Plan Fiduciary Net Position - ending	\$47,919,739	\$54,507,492	\$53,423,166	\$52,791,683	\$55,575,347	\$61,019,100
Net Pension Liability - ending, (a) - (b)	\$14,020,650	\$10,828,948	\$24,437,487	\$32,241,521	\$41,079,958	\$42,264,835

Information was provided prospectively from June 30, 2013 for GASB No. 67 and GASB No. 68 purposes. Results prior to 2018 were produced by the prior actuary.



GASB NO. 67 AND GASB NO. 68: REQUIRED SUPPLEMENTAL INFORMATION SCHEDULE OF THE NET PENSION LIABILITY

Fiscal Year Ending June 30	2013	2014	2015	2016	2017	2018
Total Pension Liability	\$61,940,389	\$65,336,440	\$77,860,653	\$85,033,204	\$96,655,305	\$103,283,935
Plan Fiduciary Net Position	47,919,739	54,507,492	53,423,166	52,791,683	55,575,347	61,019,100
Net Pension Liability	\$14,020,650	\$10,828,948	\$24,437,487	\$32,241,521	\$41,079,958	\$42,264,835
Ratio of Plan Fiduciary Net Position to Total Pension Liability Covered-employee payroll ¹	77.36% \$18,805,255	83.43% \$20,607,596	68.61% \$21,144,991	62.08% \$21,371,967	57.50% \$22,634,637	59.08% \$21,578,191
Net Pension Liability as a percentage of covered-employee payroll	74.56%	52.55%	115.57%	150.86%	181.49%	195.87%

¹ As provided by INPRS.

Information was provided prospectively from June 30, 2013 for GASB No. 67 and GASB No. 68 purposes. Results prior to 2018 were produced by the prior actuary.



GASB NO. 67 AND GASB NO. 68: REQUIRED SUPPLEMENTAL INFORMATION

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year Ending June 30	2013	2014	2015	2016	2017	2018
Actuarially Determined Contribution ¹	\$2,542,470	\$2,345,144	\$1,418,829	\$1,380,629	\$2,148,027	\$2,533,280
Actual employer contributions	\$19,443,392	\$1,173,800	\$1,062,800	\$1,439,900	\$1,485,700	\$3,013,800
Annual contribution (deficiency) / excess	\$16,900,922	(\$1,171,344)	(\$356,029)	\$59,271	(\$662,327)	\$480,520
Covered-employee payroll ²	\$18,805,255	\$20,607,596	\$21,144,991	\$21,371,967	\$22,634,637	\$21,578,191
Actual contributions as a percentage of covered- employee payroll	103.39%	5.70%	5.03%	6.74%	6.56%	13.97%

¹ Actuarially determined contribution rate was developed in the actuarial funding valuation completed one year prior to the fiscal year.

Information was provided prospectively from June 30, 2013 for GASB No. 67 and GASB No. 68 purposes. Results prior to 2018 were produced by the prior actuary.

This rate was applied to the actual covered employee payroll for the fiscal year to determine the contribution amount.

² As provided by INPRS.



GASB NO. 67 AND GASB NO. 68: REQUIRED SUPPLEMENTAL INFORMATION

SCHEDULE OF MONEY-WEIGHTED RETURNS

For Fiscal Year Ending June 30	Money-Weighted Return
2018	9.3%
2017	7.9%
2016	1.1%
2015	(0.1%)
2014	13.7%
2013	4.8%

Information was provided prospectively from June 30, 2013 for GASB No. 67 and GASB No. 68 purposes. Returns were provided by INPRS.





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Schedules of valuation data classified by various categories of mem	ıbers.
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A summary of the current benefit structure, as determined by the pr law on June 30, 2018.	ovisions of governing
Appendix C – Summary of Actuarial Methods and Assumptions	49
A summary of the actuarial methods and assumptions used to estim determine contribution rates.	ate liabilities and
Appendix D – Glossary of Actuarial Terms	53
A glossary of actuarial terms used in the valuation report.	



MEMBER DATA RECONCILIATION

	Active Members	Inactive Vested	Inactive Nonvested	Disabled	Retired	Beneficiary	Total
1. As of June 30, 2016	209	80	145	2	123	13	572
2. Data Adjustments							
New Participants	19	0	0	0	0	0	19
Rehires	3	(2)	(1)	0	0	0	0
Terminations:							
Not Vested	(7)	0	7	0	0	0	0
Deferred Vested	(8)	8	0	0	0	0	0
Disability	0	0	0	0	0	0	0
Retirements	(6)	(3)	0	0	9	0	0
Refund / Benefits Ended	(1)	0	(15)	0	0	0	(16)
Deaths:							
With Beneficiary	0	0	0	0	(2)	2	0
Without Beneficiary	0	0	0	0	(1)	0	(1)
Entitled to Future Benefit	0	0	0	0	0	0	0
Data Corrections	0	4	(2)	0	0	(1)	1
Net Change	0	7	(11)	0	6	1	3
3. As of June 30, 2017 ¹	209	87	134	2	129	14	575

¹ The valuation results were calculated using the prior year's census data and were adjusted for certain activity during fiscal year.



SUMMARY OF MEMBERSHIP DATA

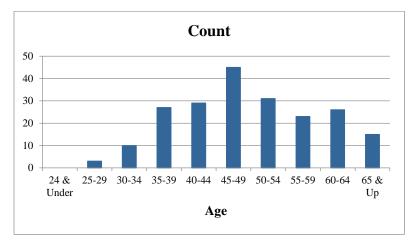
		June 30, 2017	June 30, 2018	% Change
Date of Membership Data ¹		June 30, 2016	June 30, 2017	
ACTIVE MEMBERS				
Number of Active Members		209	209	0.0%
Annual Membership Data Salary		22,797,320	22,703,504	(0.4%)
Anticipated Covered Pay for Next Fiscal Year ²		23,540,023	22,031,333	(6.4%)
Active Member Averages				
Age		49.1	49.2	0.1%
Service		10.4	10.5	0.6%
Annual Membership Data Salary	\$	109,078	\$ 108,629	(0.4%)
INACTIVE MEMBERS				
Number of Members				
Inactive Vested		87	87	0.0%
Inactive Non-Vested		138	 134	(2.9%)
Total		225	221	(1.8%)
Inactive Vested Member Averages				
Age		56.2	56.7	0.8%
Service		13.3	13.7	3.3%
RETIREES, DISABLEDS, AND BENEFICIAR	IES			
Number of Members				
Retired		123	129	4.9%
Disabled		2	2	0.0%
Beneficiaries		13	 14	7.7%
Total		138	145	5.1%
Annual Benefits				
Retired	\$	N/A	\$ 3,499,477	N/A
Disabled		N/A	97,313	N/A
Beneficiaries		N/A	 151,869	N/A
Total	\$	3,474,221	\$ 3,748,659	7.9%

¹ The valuation results were calculated using the prior year's census data and were adjusted for certain activity during fiscal year. ² Actual pay for contributing members with less than 22 years of service for the fiscal year ending on the valuation date, rolled forward at the known pay increase of 2.1%.



ACTIVE MEMBERS As of June 30, 2017 for the June 30, 2018 Valuation

	Co	unt of Membe	ers	FY 2017 Ann	ual Membership	Data Salary
<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
24 & Under	0	0	0	\$ 0	\$ 0	\$ 0
25-29	3	0	3	300,757	0	300,757
30-34	5	5	10	597,452	379,235	976,687
35-39	23	4	27	2,393,182	421,028	2,814,211
40-44	24	5	29	2,728,790	516,109	3,244,899
45-49	32	13	45	3,612,929	1,461,847	5,074,776
50-54	21	10	31	2,223,373	1,032,698	3,256,071
55-59	20	3	23	2,387,102	247,992	2,635,094
60-64	22	4	26	2,395,279	418,861	2,814,140
65 & Up	<u>15</u>	<u>0</u>	<u>15</u>	1,586,869	<u>0</u>	1,586,869
Total	165	44	209	\$ 18.225.734	\$ 4,477,770	\$ 22,703,504







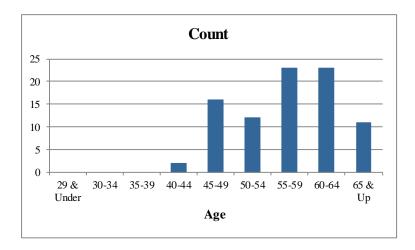
AGE AND SERVICE DISTRIBUTION As of June 30, 2017 for the June 30, 2018 Valuation

Age		0-4	5-9		10-14	15-19	20-24	25-29	30-34	Over 34	Total
24 &	Number	0	0		0	0	0	0	0	0	0
Under	Total Salary	\$ 0	\$ 0	\$	0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Average Sal.	\$ 0	\$ 0	\$	0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
25-29	Number	3	0		0	0	0	0	0	0	3
	Total Salary	\$ 300,757	\$ 0	\$	0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 300,757
	Average Sal.	\$ 100,252	\$ 0	\$	0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 100,252
30-34	Number	7	3		0	0	0	0	0	0	10
	Total Salary	\$ 625,244	\$ 351,442	\$	0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 976,687
	Average Sal.	\$ 89,321	\$ 117,147	\$	0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 97,669
35-39	Number	16	8		3	0	0	0	0	0	27
	Total Salary	\$ 1,654,449	\$ 913,048	\$	246,713	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 2,814,211
	Average Sal.	\$ 103,403	\$ 114,131	\$	82,238	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 104,230
40-44	Number	11	10		8	0	0	0	0	0	29
	Total Salary	\$ 1,140,975	\$ 1,104,327	\$	999,598	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 3,244,899
	Average Sal.	\$ 103,725	\$ 110,433	\$	124,950	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 111,893
45-49	Number	12	10		17	6	0	0	0	0	45
	Total Salary	\$ 1,251,071	\$ 1,039,553	\$	2,011,680	\$ 772,472	\$ 0	\$ 0	\$ 0	\$ 0	\$ 5,074,776
	Average Sal.	\$ 104,256	\$ 103,955	\$	118,334	\$ 128,745	\$ 0	\$ 0	\$ 0	\$ 0	\$ 112,773
50-54	Number	6	9		7	5	4	0	0	0	31
	Total Salary	\$ 577,536	\$ 1,018,481	\$	779,783	\$ 596,750	\$ 283,522	\$ 0	\$ 0	\$ 0	\$ 3,256,071
	Average Sal.	\$ 96,256	\$ 113,165	\$	111,398	\$ 119,350	\$ 70,880	\$ 0	\$ 0	\$ 0	\$ 105,035
55-59	Number	3	2		4	7	7	0	0	0	23
	Total Salary	\$ 386,587	\$ 153,932	\$	456,173	\$ 775,156	\$ 863,245	\$ 0	\$ 0	\$ 0	\$ 2,635,094
	Average Sal.	\$ 128,862	\$ 76,966	\$	114,043	\$ 110,737	\$ 123,321	\$ 0	\$ 0	\$ 0	\$ 114,569
60-64	Number	3	2		8	2	11	0	0	0	26
	Total Salary	\$ 265,248	\$ 281,155	\$	850,491	\$ 281,155	\$ 1,136,091	\$ 0	\$ 0	\$ 0	\$ 2,814,140
	Average Sal.	\$ 88,416	\$ 140,577	\$	106,311	\$ 140,577	\$ 103,281	\$ 0	\$ 0	\$ 0	\$ 108,236
65 &	Number	0	3	١.	6	2	4	0	0	0	15
Up	Total Salary	\$ 0	\$ 329,936	\$	660,712	\$ 246,010	\$ 350,211	\$ 0	\$ 0	\$ 0	\$ 1,586,869
<u> </u>	Average Sal.	\$ 0	\$ 109,979	\$	110,119	\$ 123,005	\$ 87,553	\$ 0	\$ 0	\$ 0	\$ 105,791
Total	Number	61	47		53	22	26	0	0	0	209
	Total Salary	\$ 6,201,868	\$ 5,191,873	\$	6,005,150	\$ 2,671,543	\$ 2,633,069	\$ 0	\$ 0	\$ 0	\$ 22,703,504
	Average Sal.	\$ 101,670	\$ 110,465	\$	113,305	\$ 121,434	\$ 101,272	\$ 0	\$ 0	\$ 0	\$ 108,629



INACTIVE VESTED MEMBERS As of June 30, 2017 for the June 30, 2018 Valuation

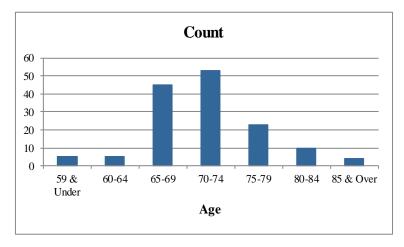
_	Count of Members				
<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>		
29 & Under	0	0	0		
30-34	0	0	0		
35-39	0	0	0		
40-44	2	0	2		
45-49	15	1	16		
50-54	7	5	12		
55-59	21	2	23		
60-64	17	6	23		
65 & Up	<u>9</u>	<u>2</u>	<u>11</u>		
Total	71	16	87		

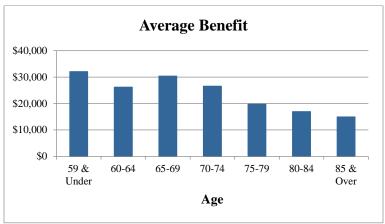




MEMBERS AND BENEFICIARIES RECEIVING BENEFITS As of June 30, 2017 for the June 30, 2018 Valuation

Count of Members			A	annual Benefits		
<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
59 & Under	3	2	5	\$ 129,454	\$ 31,008	\$ 160,462
60-64	3	2	5	102,708	28,284	130,993
65-69	38	7	45	1,186,544	179,834	1,366,379
70-74	47	6	53	1,282,542	124,946	1,407,488
75-79	21	2	23	447,462	7,217	454,679
80-84	7	3	10	143,785	25,212	168,997
85 & Over	<u>2</u>	<u>2</u>	<u>4</u>	<u>34,387</u>	<u>25,275</u>	<u>59,662</u>
Total	121	24	145	\$ 3,326,883	\$ 421,776	\$ 3,748,659





Number of Benefit Recipients



MEMBERS AND BENEFICIARIES RECEIVING BENEFITS As of June 30, 2017 for the June 30, 2018 Valuation

Schedule of Average Benefit Payments ¹

Years of Credited Service For the Year Ended June 30, 2018 < 10 10 - 14 15 - 19 20 - 24 25 - 29 30 +Total Average Monthly Defined Benefit \$1,277 \$1,802 \$2,202 \$2,307 \$2,154 \$2,651 \$2,977 Average Final Average Salary \$69,684 \$71,503 \$81,176 \$92,089 \$108,040 \$124,231 \$83,440

51

9

Schedule of Benefit Recipients by Type of Benefit Option ¹

Number of Recipients by Benefit Option

36

27

11

11

145

		_	<u> </u>	
Amount of Monthly Benefit (in dollars)	Joint with 50% Survivor Benefits	Survivors	Disability	Total Benefit Recipients
1 - 500	6	3	0	9
501 - 1,000	17	6	0	23
1,001 - 1,500	23	3	0	26
1,501 - 2,000	15	2	1	18
2,001 - 2,500	16	0	0	16
2,501 - 3,000	17	0	0	17
Over 3,000	35	0	1	36
Total	129	14	2	145

¹ Calculated using the prior year census data, adjusted for certain activity during the fiscal year.



MEMBERS AND BENEFICIARIES RECEIVING BENEFITS As of June 30, 2017 for the June 30, 2018 Valuation

	Added	Added to Rolls		Removed from Rolls		Rolls - End of Year			
	Number	Annual Benefits ¹	Number	Annual Benefits ¹	Number	Total Annual Benefits ^{1, 2}	Percent Change In Total Annual Benefits	Average Annual Benefit	Percent Change In Average Annual Benefit
2018 ³	9	\$307	2	\$28	145	3,749	7.9%	25,853	2.7%
2017 3	5	140	0	0	138	3,474	4.3	25,176	0.5
2016 ³	26	937	0	0	133	3,332	39.1	25,056	11.9
2015 3	14	319	2	14	107	2,395	14.0	22,385	1.2
2014 ³	0	0	0	0	95	2,101	0.0	22,118	0.0
2013	15	362	1	27	95	2,101	18.7	22,118	1.2
2012	6	178	1	27	81	1,770	9.4	21,853	2.7
2011	19	473	1	16	76	1,618	34.7	21,288	2.8
2010	9	187	1	16	58	1,201	16.4	20,715	0.4
2009	26	536	2	26	50	1,032	97.8	20,636	2.8

¹ Annual benefit dollar amounts are in thousands.

² End of year annual benefits are not equal to prior end of year annual benefits plus additions less removals due to beneficiary benefit changes, data changes, and COLA increases.

³ The valuation results were calculated using the prior year census data, adjusted for certain activity during the fiscal year.





Accrued Service Service credited under the system that was rendered before the

date of the actuarial valuation.

Actuarial Assumptions Estimates of future experience with respect to demographic or

economic events. Demographic assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term

average rate of inflation.

Actuarial Cost Method A mathematical budgeting procedure for allocating the dollar

amount of the actuarial present value of retirement system benefits between future normal cost and actuarial accrued liability. Sometimes referred to as the "actuarial funding

method."

Actuarial Equivalent A single amount or series of amounts of equal value to another

single amount or series of amounts computed on the basis of a

given set of actuarial assumptions.

Actuarial Accrued Liability The difference between the actuarial present value of system

benefits and the actuarial value of future normal costs. Also

referred to as "accrued liability" or "actuarial liability."

Actuarial Present Value The amount of funds currently required to provide a payment

or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest

and by probabilities of payment.

Amortization Paying off an interest-discounted amount with periodic

payments of interest and principal, as opposed to paying off

with lump sum payment.

Experience Gain (Loss) The difference between actual experience and actuarial

assumptions anticipated experience during the period between

two actuarial valuation dates.

Normal Cost The actuarial present value of retirement system benefits

allocated to the current year by the actuarial cost method.

Unfunded Actuarial Accrued Liability The difference between actuarial liability and the actuarial

value of assets. Sometimes referred to as "unfunded accrued

liability" or "unfunded liability".

Most retirement systems have unfunded actuarial liability. They arise anytime new benefits are added and anytime an

actuarial loss is realized.